

**UTILITY  
PATENT APPLICATION  
TRANSMITTAL**

*(Only for new nonprovisional applications under 37 CFR 1.53(b))*

Attorney Docket No. 19226/2191 (R-5770)

First Inventor Szyperski

Title A METHOD OF USING G-MATRIX  
FOURIER TRANSFORMATION NUCLEAR  
MAGNETIC RESONANCE (GFT NMR)  
SPECTROSCOPY FOR RAPID CHEMICAL  
SHIFT ASSIGNMENT AND SECONDARY  
STRUCTURE DETERMINATION OF  
PROTEINS

Express Mail Label No. EV139569405US

**APPLICATION ELEMENTS**

See MPEP chapter 600 concerning utility patent application contents.

ADDRESS TO: Mail Stop Patent Application  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, Virginia 22313-1450

1. ☒ Fee Transmittal Form (e.g., PTO/SB/17)  
*(Submit an original and a duplicate for fee processing)*
2. ☒ Applicant claims small entity status.  
See 37 CFR 1.27.
3. ☒ Specification [Total Pages 137]  
*(preferred arrangement set forth below)*
  - Descriptive title of the invention
  - Cross Reference to Related Applications *(if applicable)*
  - Statement Regarding Fed sponsored R & D *(if applicable)*
  - Reference to sequence listing, a table,  
or a computer program listing appendix *(if applicable)*
  - Background of the Invention
  - Brief Summary of the Invention
  - Brief Description of the Drawings *(if filed)*
  - Detailed Description
  - Claim(s)
  - Abstract of the Disclosure
4. ☒ Drawing(s) (35 U.S.C. 113) [Total Sheets 30]
5. Oath or Declaration [Total Pages 2]
  - a. ☐ Newly executed (original or copy)
  - b. ☒ Unsigned
  - c. ☐ Copy from a prior application (37 CFR 1.63(d))  
*(for continuation/divisional with Box 18 completed)*
    - i. ☐ **DELETION OF INVENTOR(S)**  
Signed statement attached deleting inventor(s)  
named in the prior application, see 37 CFR  
1.63(d)(2) and 1.33(b)
6. ☐ Application Data Sheet. See 37 CFR 1.76
7. ☐ CD-ROM or CD-R in duplicate, large table or  
Computer Program (Appendix)
8. Nucleotide and/or Amino Acid Sequence Submission  
*(if applicable, all necessary)*
  - a. ☐ Computer Readable Form (CRF)
  - b. Specification Sequence Listing on:
    - i. ☐ CD-ROM or CD-R (2 copies; or
    - ii. ☐ paper
  - c. ☐ Statements verifying identity of above copies

**ACCOMPANYING APPLICATION PARTS**

9. ☐ Assignment Papers (cover sheet & document(s))
10. ☐ 37 CFR 3.73(b) Statement ☐ Power of  
*(when there is an assignee)* Attorney
11. ☐ English Translation Document *(if applicable)*
12. ☐ Information Disclosure ☐ Copies of IDS  
Statement (IDS)/PTO-1449 Citations
13. ☐ Preliminary Amendment
14. ☒ Return Receipt Postcard (MPEP 503)  
*(Should be specifically itemized)*
15. ☐ Certified Copy of Priority Document(s)  
*(if foreign priority is claimed)*
16. ☐ Nonpublication request under 35 U.S.C.  
122(b)(2)(B)(i). Applicant must attach form  
PTO/SB/35 or its equivalent.
17. ☐ Other: \_\_\_\_\_

18. If a CONTINUING APPLICATION, check appropriate box, and supply the requisite information below and in a preliminary amendment, or in an Application Data Sheet under 37 CFR 1.76:

☐ Continuation ☐ Divisional ☐ Continuation-in-part (CIP)

Prior application information:

Examiner \_\_\_\_\_

of prior application No.: \_\_\_\_\_ / \_\_\_\_\_

Group / Art Unit: \_\_\_\_\_

**For CONTINUATION OR DIVISIONAL APPS only:** The entire disclosure of the prior application, from which an oath or declaration is supplied under Box 5b, is considered a part of the disclosure of the accompanying continuation or divisional application and is hereby incorporated by reference. The incorporation can only be relied upon when a portion has been inadvertently omitted from the submitted application parts.

**19. CORRESPONDENCE ADDRESS**

☐ Customer Number or Bar Code Label

or ☒ Correspondence address below

Name	Nixon Peabody LLP				
Address	Clinton Square, P.O. Box 31051				
City	Rochester	State	NY	Zip Code	14603-1051
Country	USA	Telephone	(585) 263-1508	Fax	(585) 263-1600

Name (Print/Type)	Alice Y. Choi	Registration No. (Attorney/Agent)	45,758
Signature	<i>Alice Y. Choi</i>		Date July 11, 2003

# FEE TRANSMITTAL FOR FY 2003

Patent fees are subject to annual revision.

Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT (\$1,326)

Complete if Known	
Application Number	To Be Assigned
Filing Date	Herewith
First Named Inventor	Szyperski
Examiner Name	To Be Assigned
Art Unit	To Be Assigned
Attorney Docket No.	19226/2191 (R-5770)

## METHOD OF PAYMENT (check all that apply)

☒ Check ☐ Credit Card ☐ Money Order ☐ Other ☐ None

☐ Deposit Account:

Deposit Account Number 14-1138

Deposit Account Name

Nixon Peabody LLP

The Commissioner is authorized to: (check all that apply)

☐ Charge fee(s) indicated below ☒ Credit any overpayments

☒ Charge any additional fee(s)

☐ Charge fee(s) indicated below, except for the filing fee to the above-identified deposit account.

## FEE CALCULATION

### 1. BASIC FILING FEE

Large Entity Fee Code	Large Entity Fee (\$)	Small Entity Fee Code	Small Entity Fee (\$)	Fee Description	Fee Paid
1001	750	2001	375	Utility filing fee	375
1002	330	2002	165	Design filing fee	
1003	520	2003	260	Plant filing fee	
1004	750	2004	375	Reissue filing fee	
1005	160	2005	80	Provisional filing fee	

SUBTOTAL (1) (\$ 375)

### 2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE

Total Claims 93 -20\*\* = 73 X Fee from below 9 = 657

Independent Claims 10 -3\*\* = 7 X 42 = 294

Multiple Dependent X = 0

Large Entity Fee Code	Large Entity Fee (\$)	Small Entity Fee Code	Small Entity Fee (\$)	Fee Description
1202	18	2202	9	Claims in excess of 20
1201	84	2201	42	Independent claims in excess of 3
1203	280	2203	140	Multiple dependent claim, if not paid
1204	84	2204	42	** Reissue independent claims over original patent
1205	18	2205	9	** Reissue claims in excess of 20 and over original patent

SUBTOTAL (2) (\$ 951)

\*\*or number previously paid, if greater; For Reissues, see above

## FEE CALCULATION (continued)

### 3. ADDITIONAL FEES

Large Entity Fee Code	Large Entity Fee (\$)	Small Entity Fee Code	Small Entity Fee (\$)	Fee Description
1051	130	2051	65	Surcharge - late filing fee or oath
1052	50	2052	25	Surcharge - late provisional filing fee or cover sheet
1053	130	1053	130	Non-English specification
1812	2,520	1812	2,520	For filing a request for <i>ex parte</i> reexamination
1804	920*	1804	920*	Requesting publication of SIR prior to Examiner action
1805	1,840*	1805	1,840*	Requesting publication of SIR after Examiner action
1251	110	2251	55	Extension for reply within first month
1252	410	2252	205	Extension for reply within second month
1253	930	2253	465	Extension for reply within third month
1254	1,450	2254	725	Extension for reply within fourth month
1255	1,970	2255	985	Extension for reply within fifth month
1401	320	2401	160	Notice of Appeal
1402	320	2402	160	Filing a brief in support of an appeal
1403	280	2403	140	Request for oral hearing
1451	1,510	1451	1,510	Petition to institute a public use proceeding
1452	110	2452	55	Petition to revive - unavoidable
1453	1,300	2453	650	Petition to revive - unintentional
1501	1,300	2501	650	Utility issue fee (or reissue)
1502	470	2502	235	Design issue fee
1503	630	2503	315	Plant issue fee
1460	130	1460	130	Petitions to the Commissioner
1807	50	1807	50	Processing fee under 37 CFR 1.17(q)
1806	180	1806	180	Submission of Information Disclosure Stmt
8021	40	8021	40	Recording each patent assignment per property (times number of properties)
1809	750	2809	375	Filing a submission after final rejection (37 CFR 1.129(a))
1810	750	2810	375	For each additional invention to be examined (37 CFR 1.129(b))
1801	750	2801	375	Request for Continued Examination (RCE)
1802	900	1802	900	Request for expedited examination of a design application

Other fee (specify)

\*Reduced by Basic Filing Fee Paid

SUBTOTAL (3) (\$ 0)

## CERTIFICATE OF MAILING OR TRANSMISSION [37 CFR 1.8(a)]

I hereby certify that this correspondence is being:

- ☐ deposited with the United States Postal Service on the date shown below with sufficient postage as first class mail in an envelope addressed to: Mail Stop \_\_\_\_\_, Commissioner for Patents, P. O. Box 1450, Alexandria, VA 22313-1450
- ☐ transmitted by facsimile on the date shown below to the United States Patent and Trademark Office at (703) \_\_\_\_\_

Date

Signature

Typed or printed name

## SUBMITTED BY

Name (Print/Type)	Alice Y. Choi	Registration No. (Attorney/Agent)	45,758	Complete (if applicable)	
Signature	<i>Alice Y. Choi</i>	Telephone	(585) 263-1508	Date	July 11, 2003

SEND TO: Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

## EXPRESS MAIL CERTIFICATE

DOCKET NO.: 19226/2191 (R-5770)

APPLICANT(S): Thomas A. Szyperski, Seho Kim and Hanudatta S. Atreya

TITLE: A METHOD OF USING G-MATRIX FOURIER TRANSFORMATION  
NUCLEAR MAGNETIC RESONANCE (GFT NMR) SPECTROSCOPY  
FOR RAPID CHEMICAL SHIFT ASSIGNMENT AND SECONDARY  
STRUCTURE DETERMINATION OF PROTEINS

Certificate is attached to the **Specification, Claims, and Abstract (137 pages)** and the **UNSIGNED Combined Declaration and Power of Attorney (2 pages)** of the above-named application.

“EXPRESS MAIL” NUMBER: EV139569405US

DATE OF DEPOSIT: July 11, 2003

I hereby certify that this paper or fee is being deposited with the United States Postal Service “Express Mail Post Office to Addressee” service under 37 CFR 1.10 on the date indicated above and is addressed to Mail Stop Patent Application, Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

Ruth R. Smith  
(Typed or printed name of person  
mailing paper or fee)

Ruth R. Smith  
(Signature of person mailing paper  
or fee)

## EXPRESS MAIL CERTIFICATE

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NUCLEAR MAGNETIC RESONANCE (GFT NMR) SPECTROSCOPY  
FOR RAPID CHEMICAL SHIFT ASSIGNMENT AND SECONDARY  
STRUCTURE DETERMINATION OF PROTEINS**

Certificate is attached to the **Drawings (30 sheets)** of the above-named application.

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**Ruth R. Smith**  
\_\_\_\_\_  
(Typed or printed name of person  
mailing paper or fee)

*Ruth R. Smith*  
\_\_\_\_\_  
(Signature of person mailing paper  
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STRUCTURE DETERMINATION OF PROTEINS**

Certificate is attached to the **Fee Transmittal for FY 2003 (1 page)** of the above-named application.

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DATE OF DEPOSIT: **July 11, 2003**

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**Ruth R. Smith**  
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(Typed or printed name of person  
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\_\_\_\_\_  
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FOR RAPID CHEMICAL SHIFT ASSIGNMENT AND SECONDARY  
STRUCTURE DETERMINATION OF PROTEINS

Certificate is attached to the **Utility Patent Application Transmittal Letter (1 page)** in  
**duplicate** of the above-named application.

“EXPRESS MAIL” NUMBER: EV139569405US

DATE OF DEPOSIT: July 11, 2003

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Ruth R. Smith  
(Typed or printed name of person  
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Ruth R. Smith  
(Signature of person mailing paper  
or fee)